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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Mark R. Prausnitz, Mark G. Allen, and Inder-Jeet Gujral

Serial No.: 09/453,109

Art Unit:

Filed: December 2, 1999

Examiner: Not Yet Assigned

For: *MICRONEEDLE DEVICE FOR EXTRACTION AND SENSING OF BODILY FLUIDS*

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including seven (7) pages of Form PTO-1449 and a copy of each document cited therein.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It therefore is believed that no fee is required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 01-2507. A duplicate of this transmittal is enclosed to facilitate the process.

U.S. Patents

<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
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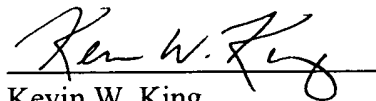
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INFORMATION DISCLOSURE STATEMENT

Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,



Kevin W. King
Reg. No. 42,737

Dated: January 19, 2000

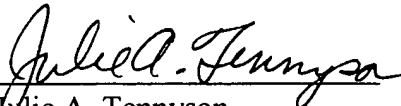
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U.S.S.N.: 09/453,109
Filed: December 2, 1999
INFORMATION DISCLOSURE STATEMENT

Certificate of Mailing under 37 C.F.R. § 1.8(a)

I hereby certify that this Information Disclosure Statement, along with any paper referred to as being attached or enclosed, is being deposited with the United States Postal Service on the date shown below with sufficient postage as first-class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

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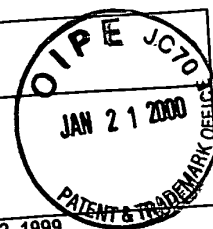
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number 09/453,109
Filing Date December 2, 1999
First Named Inventor Mark R. Prausnitz
Group Art Unit
Examiner Name
Attorney Docket Number GTRC 2139



Sheet 1 of 7

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		Re. 25,637		Kravitz, et al.	09-08-1964	
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		4,798,582		Sarath, et al.	01-17-1989	
		4,921,475		Sibalis	05-01-1990	
		4,969,468		Byers, et al.	11-13-1990	
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		5,138,220		Kirkpatrick	08-11-1992	
		5,250,023		Lee, et al.	10-05-1993	

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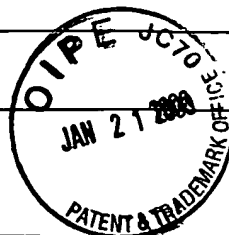


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<p>Substitute for form 1449A/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>		Complete if Known			
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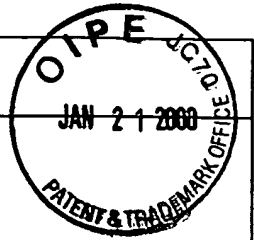
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		Examiner Name	
Sheet	4	of	7
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OTHER ART – NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		"Single-crystal whiskers," <i>Biophotonics Int'l</i> p. 64 (Nov./Dec. 1996).	
		"101 Uses for Tiny Tubules," <i>Science</i> 247 (1990).	
		AMSDEN & GOOSEN, "Transdermal Delivery of Peptide and Protein Drugs: an Overview," <i>AIChE Journal</i> 41(8):1972-1997 (1995).	
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		BRUMLIK & MARTIN, "Template Synthesis of Metal Microtubules," <i>J. Am. Chem. Soc.</i> 113:3174-3175 (1991).	
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		EDELL, et al., "Factors Influencing the Biocompatibility of Insertable Silicon Microshafts in Cerebral Cortex," <i>IEEE Transactions on Biomedical Engineering</i> 39(6):635-43 (1992).	
		FRAZIER & ALLEN, "Metallic Microstructures Fabricated Using Photosensitive Polyimide Electroplating Molds," <i>Journal of Microelectromechanical Systems</i> 2:87-97 (1993).	
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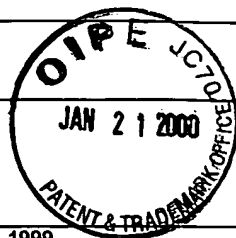
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		HAGA, et al., "Transdermal iontophoretic delivery of insulin using a photoetched microdevice," <i>J. Controlled Release</i> 43:139-49 (1997).	
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		JANSEN, et al., "The Black Silicon Method IV: The Fabrication of Three-Dimensional Structures in Silicon with High Aspect Ratios for Scanning Probe Microscopy and Other Applications," <i>IEEE Proceedings of Micro Electro Mechanical Systems Conference</i> , pp. 88-93 (1995).	
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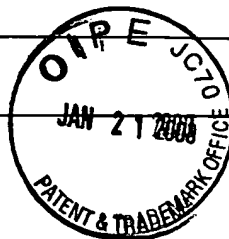


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		Application Number	09/453,109
		Filing Date	December 2, 1999
		First Named Inventor	Mark R. Prausnitz
		Group Art Unit	
		Examiner Name	
Sheet 6 of 7	Attorney Docket Number	GTRC 2139	



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		LIN, et al., "Silicon Processed Microneedles," <i>The 7th International Conference on Solid-State Sensors and Actuators</i> 237-240 (1993).	
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		<i>Proceedings of the IEEE Micro Electro Mechanical Systems Conference 1987-1998</i> ; Rai-Choudhury, ed., <i>Handbook of Microlithography, Micromachining & Microfabrication</i> (SPIE Optical Engineering Press, Bellingham, WA 1997).	
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		RUNYAN, et al., <i>Semiconductor Integrated Circuit Processing Technology</i> , Addison-Wesley Publishing Co.:Reading, MA, 1990.	
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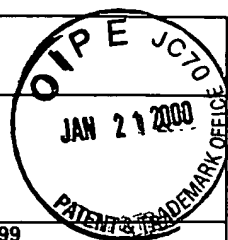


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		TRIMMER, et al., "Injection of DNA into Plant and Animal Tissues with Micromechanical Piercing Structures," <i>IEEE Proceedings of Micro Electro Mechanical Systems Conference</i> , pp. 111-15 (1995).	
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		ZUSKA, "Microtechnology Opens Doors to the Universe of Small Space," <i>Medical Device and Diagnostic Industry</i> , p. 131 (1997).	

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